



Map of Mayfield Place estate c1665 showing Mayfield Furnace Courtesy of East Sussex Record Office, AMS 5831/3

Field Notes

Henly and Riverhall ironworks

The location of Mayfield finery forge

Stream Forge, Furnace and Boring Mill

Early newspapers: references to the iron trade

The Prickett family and Wealden iron

compiled by J. S Hodgkinson

J. S. Hodgkinson

Tim Cornish and Brian Herbert

Tim Smith

J. S. Hodgkinson

J. S. Hodgkinson

Volume 36

Second Series, Part I

2016

**Wealden
Iron**

WEALDEN IRON RESEARCH GROUP

Bulletin No. 36 Second Series, Part I

2016

CONTENTS	<i>Page No.</i>
Field Notes	compiled by J. S. Hodgkinson 3
Henly and Riverhall ironworks	J. S. Hodgkinson 10
The location of Mayfield finery forge	Tim Cornish and Brian Herbert 18
Stream Forge, Furnace and Boring mill	Tim Smith 27
Early newspapers: further references to the iron trade	J. S. Hodgkinson 33
The Prickett family and Wealden iron	J. S. Hodgkinson 38
Index	44

Honorary Editor

David Crossley, 5, Canterbury Crescent, Sheffield, S10 3RW

Honorary Secretary

Dr Judie English, 2, Rowland Road, Cranleigh, Surrey, GU6 8SW

© Wealden Iron Research Group 2016

ISSN 0266-4402

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher and copyright holders.

www.wealdeniron.org.uk

FIELD NOTES

Compiled by J. S. Hodgkinson

Brokes Wood Middle Iron Age bloomery, Southborough, Kent

This site was reported previously.¹ A second radiocarbon date, again from a sample of charcoal, has been obtained of 2150±30 BP, which calibrates to 356-61 BC at 95.4% probability (235-91BC at 64.3%), confirming the Iron Age dating for the site.

Two bloomeries in Gilly Wood, Brede, East Sussex

Surface slag has been noted over an area approximately 15m x 10m centred on TQ 8395 1966. It is predominantly tap slag with some very large pieces of furnace bottom plus furnace wall exposed in a tree throw. The site is on the west side of a large ghyll (approx. 5m wide). The site lies on the Ashdown Beds just downhill of the boundary with the Wadhurst Clay. The abundance of slag suggests large scale working.

A second large site, at TQ 8366 1964, in the same wood has been discovered with slag in abundance along an arc of perhaps 40m, the centre of which is 20m uphill adjacent to a large pit assumed to be an ore pit. The slag is cut by the water of a ghyll and the exposure is at least 300mm thick. The slag contains tapped slag but much is of an undetermined form and includes some very large pieces. There is evidence of roasted ore at the top of the site, perhaps an indication a nearby ore roasting area.

A bloomery and iron ore workings in Hawkhurst Common Wood, Waldron, East Sussex

Tim Smith

A scatter of a dozen or so shaft pit mine workings are present in the NW corner of the wood centred at approximately TQ 528193. These lie due south of a much larger pit on neighbouring land at TQ 528195. The area east of this showed evidence of extensive mine working. Most probably, these larger workings supplied Waldron blast furnace with ore. Located at TQ 566181, this is the nearest furnace to the site and lies approximately 4km to the SEE although there is no evidence of a track running in that direction. Water for the Waldron furnace pond was fed by the Bull Stream which also marks the northern half of the eastern boundary of the wood. Alternatively, ore from these pits may have been carried to Stream Furnace approximately 6km to the SE at TQ 555155 via the network of existing roads and/or tracks. No direct route is evident.

The shaft pits to the south more likely supplied bloomery furnaces. A concentration of bloomery slag was located at TQ 532193 about 6m north of a small tributary of the Bull Stream alongside a boundary bank and within about 50m of the northern edge of the wood.

A marked concentration of red staining of the ground believed to be ochre (to be analysed) was present in the NE corner of the wood at TQ 535192 close to the field boundary. The deposit largely emanates from field drains.

The Bull Stream runs in a southerly direction just within the northern half of the eastern boundary of the wood and along this section there are a number of large stools of alder 1.5 – 2m in diameter with now mature trees indicating coppicing many years earlier.

A multi-period ironworking site in Withyham, East Sussex

An archaeological evaluation in early 2014, in advance of the proposed development of a burial ground at Summersales, near Crowborough, has

revealed evidence that indicates the presence of bloomery iron-making of two distinct periods. The site was examined by Archaeology Services Lewes. Five trenches were dug and a magnetometer survey undertaken. Of the five trenches, two contained significant iron smelting waste. Trench 1, on the western edge of the site close to London Road, contained two layers of bloomery smelting tap slag. The trench (TQ 5096 3255) lay within an area of high magnetic response shown on the magnetometer survey that suggested the proximity of two smelting furnaces, the contexts in which the slag was found producing seven sherds of medieval pottery dated to the 13th - 14th/early-15th centuries.

Trench 3 (TQ 5109 3252) contained the remains of a small iron smithing hearth with deposits of hammer scale and smithing slag and two sherds of Late Iron Age pottery. There were also a small number of pieces of smelting slag which showed evidence of having flowed within a furnace, and pieces of furnace lining, both of vitrified and slagged types. Again, the trench lay within an area indicated by magnetometry to contain as many as five high responses suggesting smelting furnaces.

The sites are on Ashdown Beds with Wadhurst Clay close to Trench 3.

We are grateful to Lisa Jayne Fisher for providing information about this site.

A Middle Iron Age bloomery in Lindfield Rural parish, West Sussex

An archaeological evaluation, by Archaeology South-East, in the Autumn of 2015, in advance of proposed residential development south of Birchen Wood on the northern edge of Haywards Heath, has resulted in the discovery of the remains of a bloomery smelting furnace. The subsoil is the upper part of the Wadhurst Clay overlain by Lower Tunbridge Wells Sand a few metres to the north.

Eleven trenches were excavated in a field to the north of an eastwards-flowing stream. Trench 6 (TQ 3329 2583), measuring 30m x 1.5m, was dug in a north-south orientation. The furnace, towards the southern end of the trench, comprised a shallow (20cm deep) bowl measuring 1m in length by 90cm in width, with a lining composed of a halo of intensely-

fired natural clay, which was overlain by a charcoal-rich layer sealed by a deposit of fired-clay fragments which probably consisted of pieces of the collapsed furnace superstructure. A large pit abutting the western end of the furnace probably functioned as a rake-out pit. This pit measured 3.5m north-south by at least 7cm east-west and 0.58m in depth. Radiocarbon dating of charcoal found in the remains of the hearth produced two overlapping dates: cal BC 270-180 (2320-2130 BP) and cal BC 308-200 (2230-2150 BP), both at 95% probability. Comparable with the earliest recalibrated date from Broadfield at Crawley,² this site offers the possibility that others may exist in the area, in which evidence of early ironworking has been notably absent until now.

We are grateful to Mark Taylor, West Sussex County Archaeologist, for providing details of this site.

East Lynden Furnace – A reinterpretation

Tim Smith

East Lynden blast furnace (TQ 67734 29055), lying on the River Limden some 2km SW of Ticehurst, East Sussex, is not well documented, the only record of activity so far found being between the dates 1549 to 1552 when Thomas Shoyswell may have been the occupant.³

The site was recorded by Straker who commented that although the bay is large little slag was found, suggesting a short life time.⁴ Details were amplified by Cleere & Crossley who recorded the length of the bay as 107m and height 3-4m breached at the south end by the river and at the north end by a cart track.⁵ The working area, they concluded, was probably at the northern end where a mound may indicate the loading platform.

The site was visited by members of WIRG around 1971 and reported in the Bulletin of that year with a comment that the location was somewhat different from that reported by Straker, (51° 2' 10" N 0° 23' 35" E) but, from the description, was likely to be the same site.⁶ Only small amounts of slag and sandstone were found.

The site was revisited by Victor Kellett, John Veysey and Tim Smith

Pond Shaw, i.e. as now, woodland, and immediately upstream of the bay as Upper Pond.⁷ The field immediately south of the river is called Furnace Field. A field approximately 400m north of the furnace is referred to as Coal Pit Field and to the west of this, Pond Field.

No field names are recorded in the vicinity of the downstream bay, despite the reference to an upper pond suggesting there should also be a lower pond.

The only other bay in the vicinity is about 1km downstream of the furnace site, and runs approx N-S to capture a small tributary, just north of where the river passes under the road to Ticehurst. The associated pond is referred to as Wards Brook Pond, reflecting the name of this tributary. A mill is recorded here on later maps.

The woodland containing the ore pits is divided into two, Little Pit Whent to the west and Great Pit Whent to the east.

The first edition OS 25 in. map of 1873 shows no ponds in water and a track running alongside the furnace bay on the pond side. This skirts Wedd's Farm to the north before turning SE to eventually join the road to Ticehurst. To the south, this track bridged the river continuing south to join the road to Cottenden; the bridge is no longer extant. This map also shows a 'Volunteer Rifle Range' running N-S for 500 yards lying just west of the furnace bay. This evidently pre-dates 1873 as it passes through two areas shown as woodland on the map.

During the 2015 field visit, two sunken tracks were found on the southern side of the river leading towards the furnace site. The one to the west is the track shown on the 1873 map but the one further east, through Limden Wood, is not shown. To the north of the site, the track shown on the 1873 map, running towards Wedd's Farm, is evident. A detour from this could have served as a route to the ore pits, although no such track is evident today, or shown on the maps.

A sketch plan of the furnace site on the WIRG database, unattributed and undated (but likely following the 1971 visit), shows a mound on the working side adjoining the northern end of the bay.³ Cleere & Crossley suggest this could be the loading platform.⁵ Following the 2015 visit, this has been reinterpreted as an embankment running SE from the northern end of the bay before turning due S to run parallel to the bay for nearly half its length. Its end coincides with a dip in the level of the bay

suggesting that this could have been the location of a sluice connecting a launder to the furnace wheel. A wet area of ground between the bay and mound, parallel to both, suggests the location of a wheel pit and tail race running south to join the river. The end of the launder would thus turn through 90 degrees to supply the wheel.

The majority of slag found on the site occurred below the end of this embankment. Analysis of the slag shows an anomaly. While some is typical glassy blast furnace slag other samples are much more dense and slightly magnetic. Chemical analysis reveals these to contain a total iron content of 49.7% as oxide, more typical of a forging slag. In contrast, the glassy slag has an iron content of 8.5% along with 18% CaO and 50% SiO₂. It is thus speculated that the site may have served both as a blast furnace and forge, possibly sequentially, should limited furnace output deter the construction of a forge downstream.

Although the site has been much disturbed, this interpretation fits the field evidence.

Notes and References

1. 'Field Notes', *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 2nd ser. **35** (2015), 3.
2. J. Pine, 'A re-investigation of Late Iron Age and Roman iron production, and Saxon activity, at Rathlin Road, Crawley', *Sussex Archaeological Collections*, **151**, 13-25.
3. WIRG Database, <http://www.wirgdata.org/searchsites2.cgi?siteid=565>.
4. Straker, E., 1931, *Wealden Iron* (London, Bell), 296.
5. Cleere, H. and Crossley, D., 1995, *The Iron Industry of the Weald* (Cardiff, Merton Priory Press), 329.
6. Cleere, H. and Hemsley, D., 1971, 'Fieldwork in the Wadhurst-Ticehurst area', *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 1st ser., **2**, 5-6.
7. ESRO, COL26/38, 'Field and place names taken from Ticehurst Tithe map 1840 referring to the iron and other industries'.

HENLY AND RIVERHALL IRONWORKS

J. S. HODGKINSON

A project to address inconsistencies between the data on iron-working sites held by the Wealden Iron Research Group and those recorded on the East Sussex Historic Environment Record has prompted a re-examination of the interpretation of the evidence for these works.

Ernest Straker identified three sites with these names: Henly (Bunklaw or Brinklaw) Forge and (possibly) Furnace, Riverhall Furnace, and Riverhall Forge.¹ The co-ordinates he gave, as with all of the locations in his monograph *Wealden Iron*, were in the form of latitude and longitude. Translated into modern Ordnance Survey grid references, none of the locations exactly matches an actual iron-working site, a problem with many of Straker's locations. He placed Henly in Great Wood, in Frant, and identified two pond bays in the wood both of which are now marked on the OS map (Fig. 1), at TQ 6007 3388 (A) and 5995 3400 (B). The documentary evidence for Henly is in the lists of 1574 where there are two references: "John Carpenter A forge called Brinklaw [or Bunklaw, the writing is indistinct] in Farnt"² and "John Carpenter farmeth a forge of Sir Thos. Gresham called Brokelawe forge in ffrante".³ The Frant Manor rolls are cited as providing evidence that Carpenter had land in 1547 that included the lower of these two sites. This connection is elaborated upon by Henry Eeles, in his history of Frant.⁴ For the single site that Straker identified he suggests the possibility that there may have been a furnace there as well as a forge. This will be considered again later.

Straker located Riverhall Furnace and Forge at two separate sites, again inaccurately. The furnace he placed, logically, in Furnace Wood, one of several field names with the 'furnace' prefix that can be identified in the Wadhurst and Frant tithe apportionments adjacent to the blast furnace site at TQ 6011 3355 (C), which lies predominantly on the Wadhurst side of the boundary between the two parishes. Described as

“some way above the house [Riverhall]”, he mentions a pond bay further up stream, though this should not be confused with either of the bays in Great Wood, which are on a different watercourse that joins the furnace stream downstream of the furnace site. He associates this site with Nicholas Fowle who in the 1574 lists is mentioned as having a furnace and a forge in Wadhurst.⁵ One of a small number of furnaces that had begun to cast guns and shot within the previous five or six years (i.e. since about 1569 or 70), much of its output was stated as going to the coast at Lewes.⁶ It is also stated that Fowle’s furnace was “employed to no other use but to the makeing of Ordnance”.⁷ Nicholas Fowle lived at Lightlands, Frant, before building Riverhall (house), and his son, William, later lived at Lightlands; both are within easy reach of Straker’s Riverhall Furnace site.

Straker placed Riverhall Forge, according to his description, below the end of a two-part pond, the upper part of which he stated was no longer in water. This can be identified as the Riverhall Mill pond with the forge at approximately TQ 6072 3354 (D). On the OS 6in. map of 1899 the mill pond is shown in just the state that Straker described. However, the Wadhurst Tithe map of 1840 shows both parts of the pond in water with a track,⁸ presumably on a bank (E), separating them and the 1st edition of the OS 6in. map of 1873 shows a ‘lock’ at its north end allowing water to flow from the upper part to the lower part. It would seem that, at some point before the 1840s the pond had originally terminated at the bank/track and that it had been subsequently enlarged without removing what had presumably been the earlier pond bay. Below this earlier bay could have been the original site of the forge. When the Riverhall Mill was established advantage was taken of the flow of water from the stream running from Furnace Wood, which naturally joins the Riverhall stream just below Straker’s forge site. The Furnace Wood stream was diverted to flow into the lower part of the pond to supplement the supply of water (Fig. 2).

To summarise so far, Straker identified three sites: a forge (which may have also been a furnace) in Great Wood, a furnace in Furnace Wood, and a forge at the site of Riverhall Mill.

In 1963 the Ordnance Survey noted the site that Straker had identified as Henly, translating his latitude/longitude co-ordinates to TQ 600 337.⁹

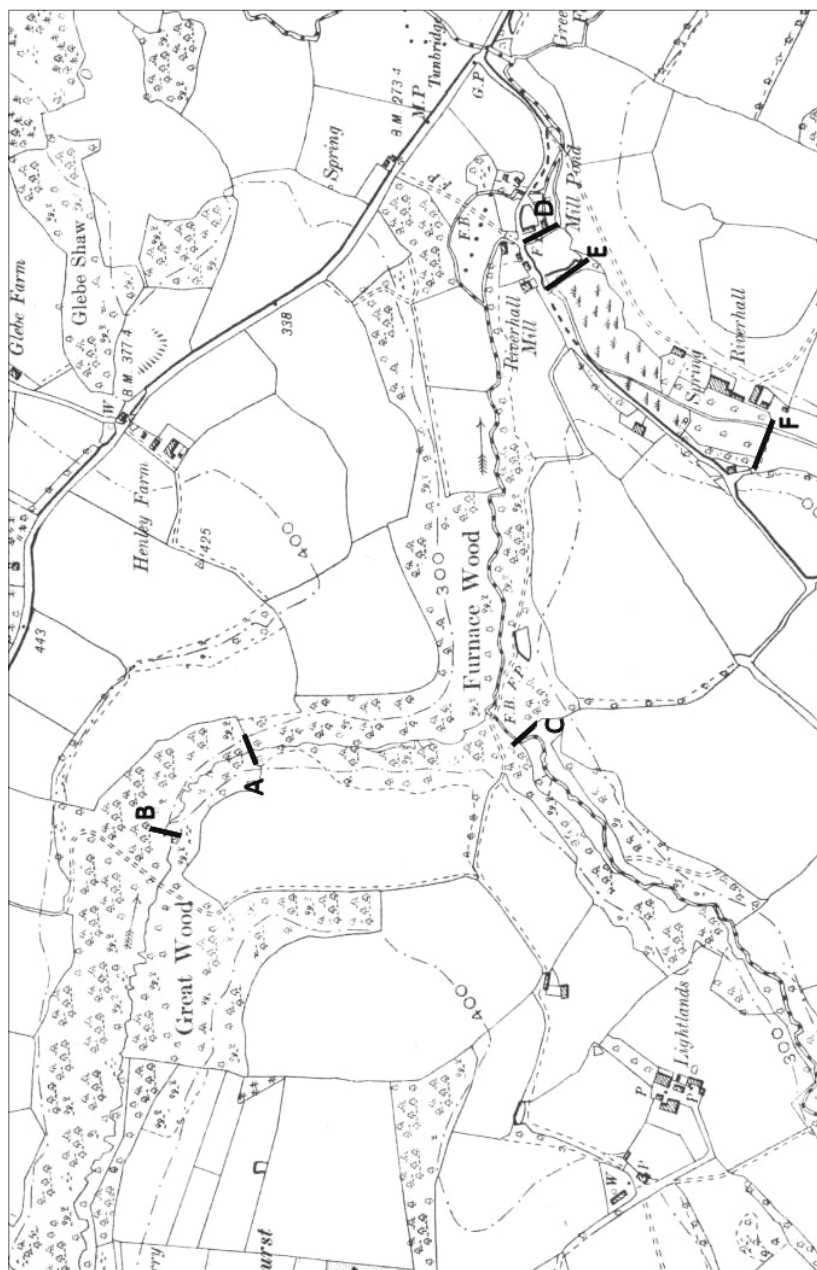


Fig. 1 Ordnance Survey 6 inch map, 1899 (detail), showing pond bays referred to in the text.

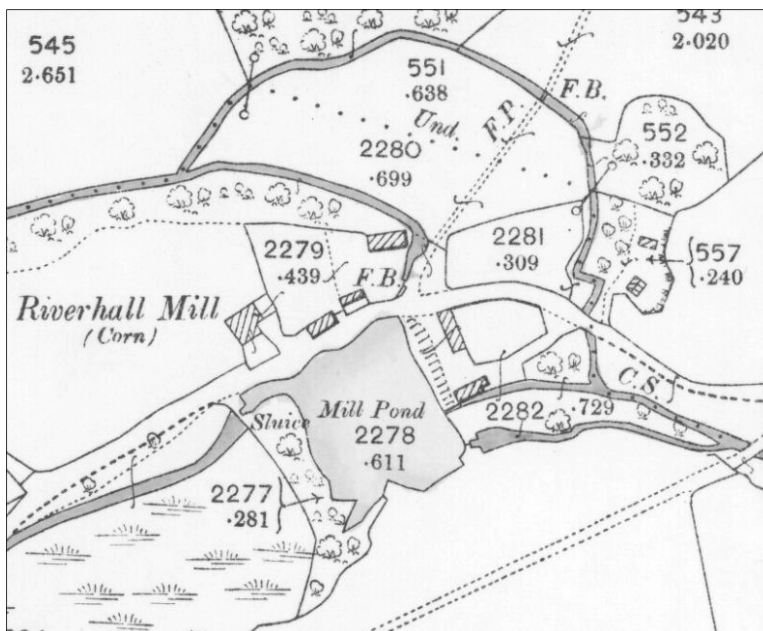


Fig. 2 – Ordnance Survey 25 inch map, 1898, showing detail of Riverhall Corn Mill.

They also noted Straker's sites for Riverhall Furnace and Forge at TQ 600336 and 604334 respectively.¹⁰ At none of these locations is there an iron-working site, suggesting that the record cards were not completed as a result of observation in the field.

In its first Bulletin, in the Spring of 1969, the newly-formed Wealden Iron Research Group published a list of the sites that Straker had identified together with translations into OS grid references of his latitude/longitude co-ordinates. Probably using the Ordnance Survey Record Cards, the grid references for the Henly and Riverhall sites are identical to those noted in 1963. However, because Straker had suggested that the Henly site might have been a furnace as well as a forge, it was listed as two sites but with the same grid reference. In Spring 1972, prior to the site being visited, Riverhall Furnace, as described by Straker, was listed by WIRG to be put forward to the Department of the Environment for scheduling as an Ancient Monument.¹¹ It had been so designated by

April of the following year.

In 1974 WIRG, under its declared aim to re-examine the locations of known ironworks, visited the sites that Straker had identified. From the report on the visit to Straker's Henly site it is evident that there had been some mis-reading of what Straker had written.¹² The report on the site at the lower of the two bays that he identified in Great Wood begins, "Straker treats Upper and Lower Henly together and rather suggests that one was a furnace and the other a forge". The assumption that had been made was that, because Straker had suggested that this single site could have had dual use, as a furnace as well as the forge operated by John Carpenter, this implied that a second site should be searched for. The other pond bay in Great Wood, mentioned by Straker, was seemingly ignored although a comment at the end of the site questionnaire held by WIRG indicates that it had been noted but not sought.¹³ In the report on Henly (Lower) Furnace, this interpretation is also explained: "At Henly Furnace Straker refers to two bays, but as it has now been found that a furnace was present at each they are being treated separately as Upper and Lower Henly".¹⁴ Part of the problem was that furnace slag and seemingly no forge slag had been found at the site in Great Wood, which Straker had clearly indicated he thought was a forge, and so a second furnace site was being sought. However, the fact that Straker had only described one site in Great Wood, which he had called Henly, but had queried whether it might also have been a furnace, suggests that he too had found furnace slag there. Straker's conclusion that the site in Great Wood was John Carpenter's forge seems to have been influenced by the evidence of the Frant Manor rolls rather than by any evidence of forge slag. WIRG had evidently failed to appreciate that the two bays Straker referred to were both in Great Wood, and instead believed that one of the bays he had mentioned was at the site he had identified as Riverhall Furnace, which is in Furnace Wood.

WIRG revisited both sites in 1993, noting the extensive slag heap at the 'Lower' site¹⁵ - incidentally, consistent with Riverhall Furnace's operation over a period of nearly a century - and the absence of the characteristics of a blast furnace site at the 'Upper' site, despite the evidence of slag. It was also noted, perhaps part of the continued misunderstanding of Straker's reference to two sites in Great Wood, that

the 'Upper' site was not a pen pond for the 'Lower' site as it was on a different stream.¹⁶

What is a mystery is why the Field Group at that time signally failed to give any credence to Straker's identification of Riverhall Furnace at the location they were identifying as Henly (Lower) Furnace. Straker had found no documentary evidence to support a Henly Furnace and none has come to light since. However, because Cleere and Crossley relied on WIRG's field work for the gazetteer of their book, Straker's identification of Riverhall Furnace was either overlooked or dismissed and Henly (Lower) substituted for it when their book was published in 1985.¹⁷

This caused a need to find a new location for Riverhall Furnace. In 1974 members of the Field Group visited the site where Straker had located Riverhall Forge and the published report again suggests some confusion with identifying Straker's location:

*"When visited it was difficult to agree with Straker's conclusions as to its use. The stream is a small one and a furnace and forge would obviously need pen ponds. No sign of a furnace site could be found to the S. (i.e. above) the house, although about 100 yards away, in this direction, is a high and well-preserved bay."*¹⁸

This statement does not suggest that the search for the site was being conducted in the location that Straker had described, i.e. in Furnace Wood and on a different stream, but that may be because the site Straker identified had already been designated by WIRG as Henly (Lower). The "well-preserved bay" was recorded at TQ 6048 3325 (F) in the notes of the visit, with another at TQ 606334, which may refer to the track/bank 'E'.¹⁹ Search at this time concentrated on the former mill site, where blast furnace and forge slag were found. A "tongue-shaped bank" was noted and interpreted as a furnace loading ramp, though its position shown on a sketch of the site on the site questionnaire, and compared with the OS 25in map, suggests that it may have been where the former mill building stood. The presence of blast furnace slag does not always indicate that a furnace existed at that site, and this very case has been put forward for the slag found at the bay in Great Wood, so it is possible that the furnace slag found in the bed of the former mill pond in 1974 did not signify that there had been a furnace as well as a forge. On the basis of the field investigations in 1974, however, the site of Riverhall Furnace was revised

to a site contiguous with its associated forge and in that location included in their gazetteer by Cleere and Crossley.²⁰

In conclusion, it is argued that an error was made in re-designating the furnace site in Furnace Wood on the Wadhurst/Frant border as Henly (Lower) Furnace. Straker's inaccurate lat/long co-ordinates, not helped by subsequent translation into grid references and, above all, a mis-reading of Ernest Straker's description and location of the site he identified as Henly or Brinklaw Forge led to the mistaken search for another furnace site, a putative Henly furnace for which no other evidence exists, and the consequent disregard of Straker's identification of Riverhall Furnace. The position of the furnace site strongly connects it with the Fowle family who operated it throughout its working life. It is close to both of the houses the family occupied - Lightlands and Riverhall - and indeed much nearer to Lightlands, which was Nicholas Fowle's home until 1591, than the mill site. And the amount of slag is consistent with an operational life extending from before 1562 until at least 1653.

Straker's identification of Brinklaw Forge with the pond bay in Great Wood can be sustained through circumstantial documentary evidence if not the material on the ground. The existence of forge cinder below the former mill pond gives credence to Straker's assertion of the location of Riverhall Forge, although the possibility remains that the bank 'E' may be the actual forge pond bay and that the bed of the eastern extension of the former mill pond may hold evidence of such use.

It is proposed that Straker's identification of Riverhall Furnace be reinstated in the archaeological record at TQ 6007 3388, and the name, Henly (Lower) Furnace, deleted, that Henly (Upper) Furnace be reinstated as a possible Henly (or Brinklaw) Forge at TQ 6011 3355, and that Riverhall Forge be located at TQ 6073 3353.

Notes and References

1. Straker, E., *Wealden Iron* (London, Bell, 1931), 275-6.
2. The National Archives (hereafter TNA), SP 12/95/61 f.132.

3. TNA, SP 12/95/79 f.177v.
3. Eeles, H. S., *Frant – A Parish History* (Tunbridge Wells, Courier, 1947), 148-9.
4. TNA, SP 12/95/20 f.49.
5. TNA, SP 12 /95/15 f.38.
6. TNA, SP 12/95/20 f.48.
7. East Sussex Record Office, The Keep, Moulseccomb, Brighton, TD/E132.
8. Ordnance Survey Record Card (hereafter OSRC) TQ 63 SW 4, 4 Mar 1963.
9. OSRC, TQ 63 SW 6, 4 Mar 1963.
10. ‘Sites for Scheduling’, *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 1st ser., **3** (1972), 19.
11. ‘Inventory of sites visited by WIRG’, *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 1st ser., **8** (1975), 33.
12. Wealden Iron Research Group, photocopy of manuscript site questionnaire with handwritten amendments, Henly (Upper), 1 Jan 1975.
13. ‘Inventory of sites visited by WIRG’, *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 1st ser., **8** (1975), 32.
14. Berners Price, J. F., ‘Henly Furnace (Lower), near Wadhurst’, *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 2nd ser., **13** (1993), 4-7.
15. Herbert, B. K., ‘Henly Upper Furnace’, *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 2nd ser., **13** (1993), 7-8.
16. Cleere, H. and Crossley, D., *The iron industry of the Weald* (Leicester, Leicester University Press, 1985), 336.
17. ‘Inventory of sites visited by WIRG’, *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 1st ser., **8** (1975), 34-5.
18. Wealden Iron Research Group, manuscript site questionnaire, Riverhall Furnace and Forge, 1974.
19. Cleere and Crossley, *The iron industry of the Weald*, 352.

THE LOCATION OF MAYFIELD FINERY FORGE

TIM CORNISH AND BRIAN HERBERT

In 1545 the archbishop of Canterbury's Mayfield estate, held by the church for over 600 years, reverted to the Crown under Henry VIII and was sold to the Gresham family who specialised in international finance and arms trading. In 1567 when Antwerp's position as a centre for world trade was destroyed, Sir Thomas Gresham set up a blast furnace in Mayfield to produce guns. The ponds shown on a map of 1663 on the cover of this Bulletin¹ were probably converted from archiepiscopal fish ponds and the area became one of the main producers of cast iron cannon in the Weald.² The details of the furnace and its operation are well-researched and known, and there is now an interpretation board on the site. In 1598, the furnace was sold by Sir Henry Neville to Thomas May and the operation began to decline. The last mention of the furnace is dated 1664.

Identification of the Mayfield finery forge site linked to the furnace has always been an enigma. There are no documentary references to its operation and it does not appear on the detailed map of the site dated 1663.¹ The reasons for believing in its existence are the naming of two fields on the Tithe Map of 1843, 'Great Forge Field' and 'Little Forge Field', despite the passage of over two hundred years, and also the discovery of one forge bottom, some fist-sized lumps and some finely-divided magnetic forge cinder.² Cleere and Crossley's gazetteer³ tentatively offers a site for the forge wheel-pit and, following a visit by attendees at WIRG's AGM in 1981, their description is of an "obvious disturbance" on a loop of the dry channel 150m downstream from the furnace site, where "a section exposed in N bank shows a filled-in hollow with charcoal, slag and roof-tiles at the base".⁴ This observation only makes sense if the distance is re-described as 230m, i.e. where a 180-

degree loop of the furnace spillway almost meets the furnace tailrace.

The recent award of a DEFRA grant to the owners of the Mayfield iron-working site (the Rausing family of Wadhurst Park) resulted in a mapping project led by Dr. Nicola Bannister in conjunction with Canterbury Archaeological Trust.⁵ Investigation of the site on the north bank of the furnace tailrace (including the previously identified forge site) proved inconclusive. Crucially, this mapping project did not investigate land on the south side of the furnace tailrace where a forge site could have operated, since land ownership changes at this point. Indeed, further detailed investigation of the location by the authors in the spring of 2014 raised serious doubt about locating a forge on the 180-degree loop towards the end of the furnace spillway. No evidence for a forge site was found here and prolonged discussion about water supply and water levels concluded that the historic identification of this location for the forge had been in error.

In arguing for the proposed new location for the forge, the authors have focused on the water supply system to which the Tudor engineers gave so much attention, i.e. that as much water as necessary arrived at the forge site and at an appropriate level for driving either overshot or breast-shot waterwheels.

While a finery forge could quickly close down if it ran out of water, two days' notice was necessary for a blast furnace because the burden would go cold, solidify and require rebuilding. The location of the Mayfield ironworks depends on a remarkably small catchment area, bounded roughly by the arc of the modern A267 which follows the watershed ridge to the north west of the site. The geology consists of the upper levels of the Ashdown Sand with outcrops of Wadhurst Clay on the hilltops where iron ore would have been available; there are several ore pits to the north of the Mayfield site.

The 1663 map (dated by the marriage of John Baker and Ruth Farnden, whose coats of arms both appear on it) shows that the main stream from the NW provided water for a series of three large pen ponds that fed the furnace pond in addition to a small stream from the west supplying two smaller pen ponds. The Mayfield site is the only one in the Weald with a separate water supply for the boring mill which depended on a pen pond on a second small stream from the west. This pen pond

probably required a tampion⁶ to control yet more water to the furnace pond; this is shown clearly on the 1663 map where a squiggly water course is marked and is further evidence of the attention given to flexible and multiple sources of water.

Prior to the iron working site this small stream passed, unhindered, down the valley towards the furnace tailrace. But when the pen pond was installed the spillway water flowed to the boring mill bay across the valley, with the bay extending eastward by about 50m to hold back the large boring mill pond having its spillway at the east end. A flume from the boring mill bay, towards the east end, would have directed water onto an overshot waterwheel whose axletree was attached to the cannon boring bar. The boring mill pond is about 5m higher than the furnace tailrace, into which the boring mill tailrace and spillway water flows.

A sketch map of the site, Fig.1, based on the mapping survey by Crispin Jarman of Canterbury Archaeological Trust, shows the relevant features of the whole site including the location of one forge-bottom, fist-sized lumps and small particles of forge slag discovered in the furnace tailrace, although not within the area mapped by Crispin Jarman. Importantly, forge slag does not appear either up or downstream of this area. Investigation at Queenstock (Iron Plat) Forge in Buxted, Sussex, has shown that forge bottoms disintegrate after many years in water. It is now necessary to work out exactly where the forge building was located and how water power arrived at the water wheels.

The furnace spillway water course (green on map) demarcates the northern edge of the ironworking site, and its wide mouth was vital in the event of a downpour to protect the blast furnace site from flooding and destruction. The furnace spillway water course narrows as it progresses towards the forge site which relied on this water as its only source of power; this is a serious limitation to its operation and one which previous investigations have not picked-up on. In theory, extra water could have been available from the furnace tailrace, but how would this have been arranged? One feature, so far unexplained, are two mounds of furnace slag on the south side of the furnace tailrace just below where the boring mill water enters. Also, moving cannon to the boring mill site involves a tortuous, if not impossible, route to bypass the large boring mill pond.

From these three, potentially useful pieces of evidence the authors

considered the idea of a putative dam (yellow star on map) wholly within the 2m-deep furnace tailrace (this would have been washed away during the intervening years and leave no trace). The dam's length, about 4m, effectively equal to the width of the furnace tailrace, would have raised the water level to about the 64m contour (black line on pink on map), helpfully delineated on the Canterbury Archaeological Trust map, allowing it to transfer water between the two protecting slag mounds, flow across the track alongside the furnace tailrace and into a nearby, rather faint, watercourse (grey on map). This winds its way across the valley and after 50m reaches the furnace spillway water course. Now these combined waters pass through the deeply incised 180-degree loop and hence towards the forge site. In this way the forge site, now defined by the recently discovered forge slag, could now operate using all available water from the valley.

Because the putative dam floods both the furnace and boring mill tailraces it would have allowed cast cannon to be floated by raft direct from furnace to the boring mill, thus solving carriage of cannon problem. The 64m contour, suggests that the water levels were accurately predicted to not quite back-up to the furnace and boring mill water wheels, showing the considerable skill of Tudor engineers in designing the water system. Once the cannon had been bored they could be floated back and loaded onto wagons at the putative bay.

Further evidence for the putative bay may be seen where the boring mill spillway water enters the tailrace valley about 60cm above the valley bottom; this being the depth of water in the tailrace due to the putative bay.

The final length of the furnace spillway water course (light green on map) following a 180-degree loop deeply incised into the hillside is clearly man-made since it is much wider and deeper than the up-valley furnace spillway water course. Natural meanders (the loop) tend to be shallow so it is suggested that the deep incision is man-made using material dug out from the 180-degree loop and thrown up onto the bank to maximize the volume of water stored. However, a dam (red star on map) about 4m long (which would also have been washed away to leave no trace) would have been required at the end of the 180-degree loop which stops at right angles to the furnace tailrace. Here measurements suggest

that the water would be 1.2m deep and nearly 2m above the furnace tailrace water and be sufficiently high to drive the forge's water wheels on fairly level ground on the south side of the furnace tailrace. A penstock gate on the dam would control the water-flow to a launder across the furnace tailrace. Unfortunately, it is not exactly clear where the forge building, with its two or three water wheels, would have been located and there is no sign of a tailrace from the water wheels, suggesting that the water debouched straight into the furnace tailrace water. A post which is still preserved *in situ* within the furnace tailrace is strong evidence for a launder support.

It has recently been appreciated that the furnace spillway water course 'aims' towards the furnace tailrace just prior to the 180-degree loop; it seems likely that tailrace water originally passed into the tailrace here; this makes the loop unnecessary. So why was the loop dug; it is suggested that this is yet further evidence that it was added at a later date to store water in the forge pond.

Accurate dating of the forge construction is not possible, however, there are some factors to take into account. Tudor ironworkers in a remote spot like Mayfield would find a finery forge useful for making the tools necessary for the blast furnace, e.g. the tongs and pokers and repairs made to the bellows mechanism not to mention making and repairing the skeletal wrought iron framework around each cannon mould. Specialized high-carbon steel would be required for the four cutting bits at the end of the long, wrought iron boring bar.⁷ With only a small amount of forge cinder found at the site this implies that the forge had a short life and was used mainly for making tools etc. rather than the production and onward sale of wrought iron. The likelihood is that the forge was constructed by Sir Thomas Gresham around 1567. This was a very wealthy man who dealt with matters on a large and ambitious scale, a man capable of substantial investment in an important new project. The absence of the forge from the 1663 map suggests that it was defunct by this time. Construction at a later date is unlikely as the last reference to the furnace is for a repair in 1664 which probably means that there was little activity on the site after this time. The Baker family who finally owned the site were not known for making substantial investments in their Mayfield estate, but rather for managing a steady decline.

Conclusion

Recent fieldwork at Mayfield iron working site has located many new features, a résumé is given: -

- Forge slag found in the furnace tailrace, 230m from the furnace, at TQ 5944 2801, is now considered the forge site, but there is no sign of a tailrace.
- The 180-degree loop at the end of the furnace spillway is effectively the forge pond, with its dam at TQ 59435 28035. The loop is probably an extension of an originally shorter furnace spillway water course.
- Originally, the forge could only operate when the furnace pond was overflowing the spillway, so limiting its operation. To overcome this a putative dam was considered within the furnace tailrace at TQ 59350 28109 to allow water to overflow the furnace tailrace and flow towards to the forge pond.
- The now dammed furnace tailrace and boring mill tailrace were also flooded, this enabled cast cannon to be floated by barge between furnace and boring mill so solving the difficult problem of moving the cannon overland.
- Evidence that the boring mill water tailrace was flooded to the 64m level is seen where the boring mill spillway water enters the tailrace at the 64m level.
- Extra water for the furnace pond is available from the pen pond prior to the boring mill pond.

Detailed examination of the water supply around the site shows remarkable complexity, which in itself suggests that problems with the water supply may have led to the abandonment of the forge. The putative dam delivered water to the forge site from both the furnace tailrace, and boring mill tailrace and spillway, in fact all water available in the valley. The authors' conclusion is that this complexity was serious enough to have jeopardized the entire finery forge operation and may explain why there is so little evidence of sustained production here.

It has been argued that a forge would have been useful for the

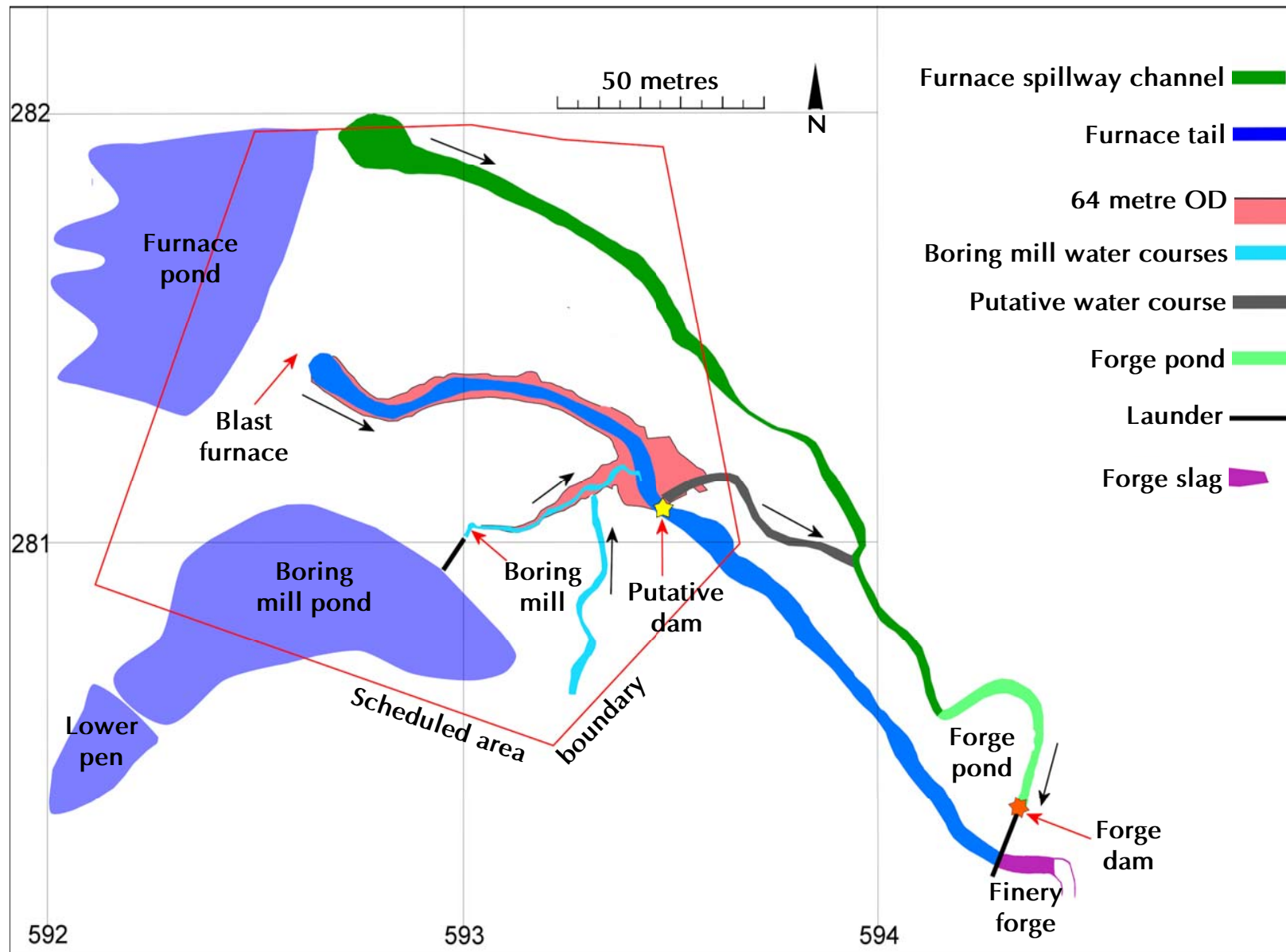


Figure 1 – Mayfield Forge, suggested water system, based on a map by Crispin Jarman (Canterbury Archaeological Trust 2014)

production of wrought iron for skeletal framework of the cannon mold, but once cannon casting had ceased the forge would become redundant.

Notes and References

1. East Sussex Record Office, Moulsecocomb, AMS 5831/3.
2. Forge bottoms are a distinctive, disc-shaped, waste cinder produced at a finery forge and their size and weight varies considerably. They have a slightly concave top side and convex under-side, with an average one 36cm diameter, 15cm thick and 14kg weight.
3. Cleere, H., and Crossley, D. 1995, *The Iron Industry of the Weald* (Cardiff, Merton Priory Press), 343.
4. Tebbutt, C. F., 1982, 'Field Notes', Wealden Iron, Bulletin of the Wealden Iron Research Group, 2nd ser., **2**, 9.
5. Bannister, N. R. and Jarman, C., 2014, Mayfield Ironworks, Wadhurst Park Estate, unpublished Core Monument Record, Canterbury Archaeological Trust.
6. Binnie, G. M. 1987, *Early Dam Builders in Britain* (London, Thomas Telford).
7. Butler, D. S. and Tebbutt, C. F., 1975, 'A Wealden Cannon-Boring Bar', *Post Medieval Archaeology*, **9**.

STREAM FORGE, FURNACE AND BORING MILL, CHIDDINGLY

TIM SMITH

Located at TQ 5555 1550, approximately 2km SW of Horam in East Sussex, and lying within the parish of Chiddingly, and identified as Stream Mill on modern maps, the first record of ironmaking on this site is of a forge in 1548.¹ In 1570 the 'hammer' was operated by John French.

The addition of a blast furnace is indicated by the issuing of a lease in 1597 by Stephen French, forgemaster, to Edward Montagu for 21 years of the 'lower' furnace, called 'the New Furnace'. The reference to the 'lower' furnace possibly relates to it being downstream of Waldron furnace (TQ 566 181) some 3km to the NNE, the earliest known date for which is 1560.² Indeed, a search for a 'lower' furnace by members of WIRG in 1981 found no evidence of a second furnace in Chiddingly parish.³

In 1650, John Fuller inherited the lease of the forge and furnace on the death of his father-in-law, the Rev John Nutt of Mays in Selmeston⁴ and worked it with co-lessee, Thomas Dyke. Fuller's son, also John probably worked it until 1693, the year he built a furnace at Heathfield.⁵ Guns and shot were cast there in 1662-3.⁶

The furnace is marked on Budgen's map of 1724 although not listed in 1717. The pond is marked on the Yeakell & Gardner 2in. map of 1778-83 along with a building below the eastern end of the bay and a tail race flowing from this.

The site is recorded as a water-powered corn mill on the tithe map of 1839 and owned by R. Reeves in 1844.⁶ The corn mill was still in use in 1900 but no longer operating by 1939. The site is probably that of a much earlier mill mentioned in Domesday Book which valued it with the miller at 4 shillings a year.⁷

The tithe map shows the pond to be about 380m in length and occupying 12 acres. Relevant field names are Forge Wood bordering the

eastern edge of the pond and Cinder Brook below the bay. 12 acres was also the size in 1648 when Stephen French operated the furnace.⁸ The pond is fed from the north by the Little London stream. By 1875, when the first edition Ordnance Survey map was published, the pond length had reduced to around 100m and the area fallen to 3.8 acres. By 1898, the river had been diverted to flow to the west of the pond, entering it near the western end of the bay. Today the pond is dry but marshy and retains shallow water in periods of high rainfall.

The site was revisited by WIRG in early 2015 in an attempt to locate the sites of the furnace, forge and boring mill.

The land below the pond bay, now split into two ownerships, has been landscaped. Scatters of both blast furnace slag and forge slag were found across the entire site. Slag has also been reported in the field immediately south of the present property where a WWII air crash was excavated.²

A weir carries the stream through the western end of the bay. This is shown on the Yeakell & Gardner map of 1780-83 and was probably originally the spillway. This is crossed by a bridge, with the date 1752 carved into the stonework, which carries a track across the bay. Fallen wooden sluice gates can be seen lying on the stream bed on the pond side and a ferrous accretion forms a platform in the stream below the weir. Here there is also a scatter of slag, but the present owner believes this to have originated from elsewhere on the site, being carried there by an earlier owner to form a riverside platform. A cut channel carries the overflow to the Bull River some 85m downstream. To the east of this, aligned about midway along the bay, is the ghost of the channel of the original stream meandering south. A ramp descends W-E from the top of the bay, at a slight angle from the bay, into the working area.

The mill survives below the eastern end of the bay and is now a residence named Mill House. A later house, Stream Mill, not shown on the 1875 OS map, lies to the east of this. The 25in. OS map of 1875 clearly marks a sluice on the bay above the mill and two tail races emerging from the mill to combine into a single tailrace flowing south for about 425m to join Bull Stream at TQ 5571 1507. Early pictures of the mill show a single wheel pit on the west side of the building. A culvert carries water underground to the tail race. About 100m downstream, at about TQ 555153, several forge bottoms form a revetment on the west

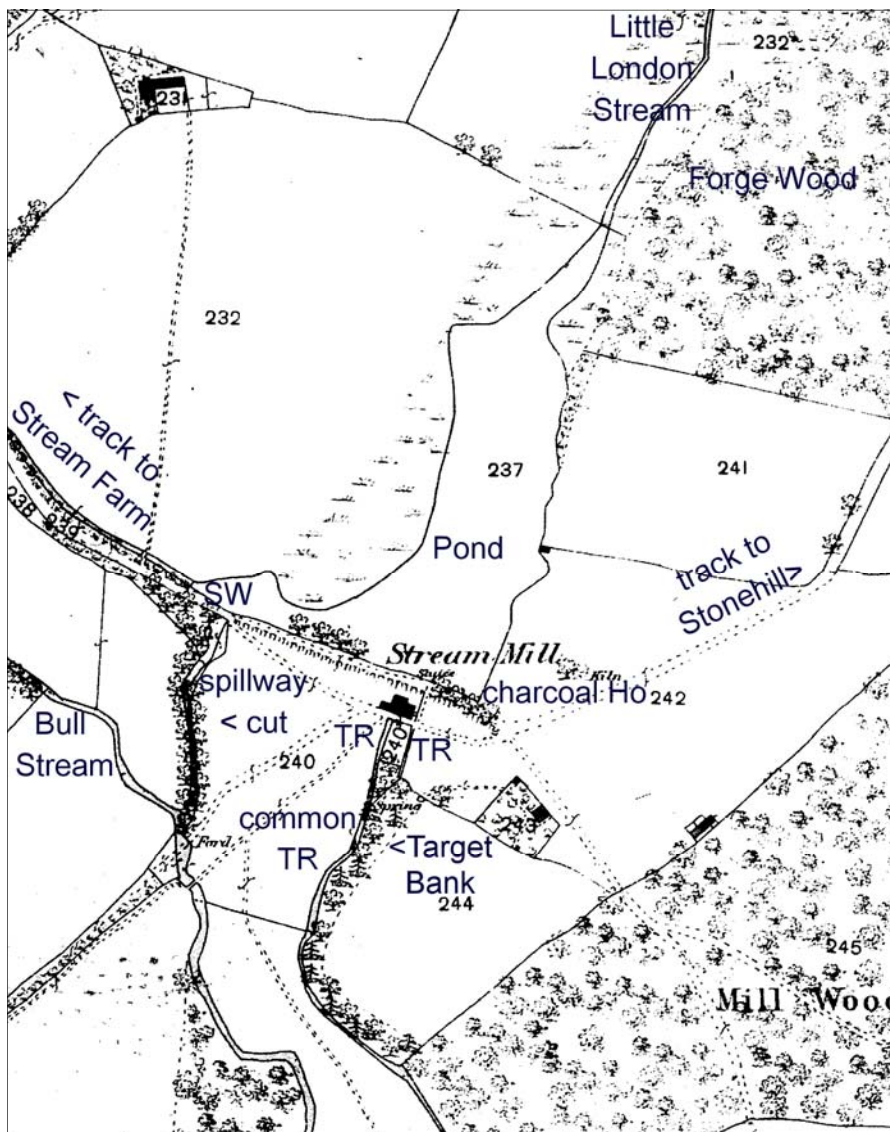


Figure 1 – Stream Mill OS 25in. map of 1875 showing twin tail races (TR) emanating from building below eastern end of bay

bank suggesting a crossing place. In a bank, on the eastern side of the tailrace, and north of this crossing, centred on TQ 5555 1539, a number of cannon balls were found using a metal detector. These were embedded in the bank, typically 30-45cm deep, suggesting it was used as the target for testing cannon cast on the site. Four of these balls were recovered for



***Figure 2 – Cannon proofing ball
approx. 81mm (3.18 ins.) weight,
approx. 2.1kg (4lb 10oz)***

examination and are all of similar diameter – around 81mm (3.18ins.) and each weighed around 2.1kg (4lb 10oz). One showed gross misalignment of the two halves of the casting mould. Previously, a boring bar (now preserved in Anne of Cleves House, Lewes) had been found in the garden of Mill House. It was fitted with a cutter of 13cm (5.1 ins.) diameter.⁹ The smaller diameter and misshape of the balls discovered, and their size, not conforming with known cannon sizes, suggests these were used for proofing cannon, probably being packed into the bore surrounded by wadding, a technique which has been demonstrated in the television

programme, ‘Scrapheap Challenge’.

Finds in the garden of Mill House include a cast iron plate of estimated weight about 150kg and dimensions 3ft. x 2ft. (942 x 616mm) with an inner square flange 16ins. x 16ins. (406 x 406mm) and two square ports inclined towards each other at 10° from horizontal, each 6ins. x 6ins. (150x150mm), with traces of brick adhering to corners. The reverse side is cast with a 10mm lip around the edge. The unflanged thickness of the plate is 35mm but bevels out to full width on the reverse side to a greater thickness surrounding the two square ports. Details circulated to a number of relevant organisations have failed to identify it as being related to a furnace or mill. One suggestion is that it was a structural component of a building and another that it is related to a short lived brick kiln shown



***Figure 3 – Cast iron plate
weighing approx. 150kg.***

only on the 1875 OS map. The only other metal find was that of a thin walled cast iron trough of approx dimensions 527 x 185 x approx. 180mm, and wall thickness 10mm (remarkably thin if cast from a charcoal fired furnace) open at one end, but not broken, with a loose plate capable of closing that end. Again, no positive identification as to its use or date has been found. In addition, old timbers are stored in an outhouse of the mill.

Above the bay, a little to the east of the former pond fringe, is a charcoal darkened area of soil containing small pieces of slag and broken bricks. Its proximity to the mill house suggests a charcoal store.

The bricks, however, probably arise from the later kiln mentioned above, shown only on the 1875 OS map and absent from both the 1839 Tithe map and 1898 OS map.

Inspection of woodland to the east of the site, Mill Wood, and to the NE, Forge Wood, showed that while these had been replanted in modern times, the boundary hedges contained ancient stools of hornbeam estimated by size to have been contemporary with the forge and furnace. There was also evidence of ancient hazel and birch.¹⁰

Conclusion

There is strong evidence that the forge was located immediately below the eastern end of the bay where the later mill building is located. The two tail races indicate the presence of wheel pits on both the western and eastern sides of the building, typical of a refining forge.

The location of the later blast furnace is more problematic. While both

furnace and forge slag are evident in abundance, later landscaping of the site has resulted in a wide scatter of both slag types. A possible location is mid-way below the bay at the end of a ramp descending obliquely from the bay and using the original stream bed as the tail race.

The later boring mill was likely located at the western end of the bay below the present weir as accretions of iron rich material in the stream are indicative of corroded boring swarf.

References

1. Straker, E., 1931, *Wealden Iron* (London, Bell), 114
2. Cleere, H. and Crossley, D., 1995, *The Iron Industry of the Weald* (Cardiff, Merton Priory Press), 359.
3. Tebbutt, C. F., 1981, 'Field Group Reports', *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 2nd ser., **1**, 22.
4. Salt, M. C., 1966, 'The Fullers of Brightling Park', *Sussex Archaeological Collections*, **104**, 64.
5. Cleere and Crossley, *The Iron Industry of the Weald*, 335.
6. East Sussex Record Office, Moulsecoomb (hereafter ESRO), SAS-RF/15/26.
7. Lower, M. A., 1849, 'Historical and archaeological notices of the Iron Works of the county of Sussex', *Sussex Archaeological Collections*, **2**, 208.
8. ESRO, SAS-RF/5/26. Lease by French Fuller of Waldron to Stephen French of tithes belonging to the rectory of Chiddingfold.
9. Butler, D. S. and Tebbutt, C. F., 1975, 'A Wealden Cannon-Boring Bar', *Post Medieval Archaeology*, **9**, 38.
10. Brown, D., Mill & Forge Woods, unpublished survey.

EARLY NEWSPAPERS: FURTHER REFERENCES TO THE IRON TRADE

J. S. HODGKINSON

1. *London Evening Post*, 25th August 1747

*To Be LETT
And enter'd upon immediately
An old and well accustom'd Forge Hammer, in very good Repair,
known by the Name of Woodcock Iron Forge; it is very
conveniently situated in the Parish of Godstone in the County of
Surrey, about 26 Miles from London; it has upwards of fourscore
Acres of Water to work it, and will be lett with or without 500
Acres of Wood-Land.
For further Particulars enquire of Edw. Evelyn, Esq; at
Felbridge in the Parish of Godstone, Surrey.
N. B. There is some ready work'd Iron to be sold.*

Woodcock Forge had operated in conjunction with Hedgecourt Furnace in the 16th and early-17th centuries, but this association would not be renewed until 1758 when the, by then renamed, Warren Furnace was brought back into operation. Samuel Baker had occupied the forge in the 1740s so this notice would have signalled the expiry of his lease. Also in 1747, the ownership of the forge had changed hands from the Gage family to the Evelyns.¹

1. *Sussex Weekly Advertiser*, 1st November 1756

*This is to acquaint the Public,
That there is now to be sold, at the Warehouse in the Cliffe, the
foot of the bridge, late Mr. John Whitfield's, a large Parcel of*

Iron, of all Scantlings, made at Buxtead Forge, which is now in full Work, and will continue so, where Gentlemen, Blacksmiths. &c may depend on being supplied at 20l. per Ton, ready Money at the Forge, and at the Warehouse in the Cliffe at 20l 6s where constant Attendance will be given by Christopher Chrippes.

For six Months Credit 5 per cent will be expected.

N B Five Shillings per Hundred will be given for any Quantity of old Iron

John Whitfield had purchased the Manor of Howbourne, then in Buxted, in 1746, but in 1756 he had conveyed the property to James Penvold and John Smalman, though Whitfield and his wife seem to have retained an interest, perhaps because Penvold and Smalman were acting as mortgagers. By 1756 it was leased to Edward Gorringe, and operation of the forge was in the hands of Christopher Cripps.² Howbourne was not the only forge to have a wholesale outlet in Lewes in this period; the proprietors of Maresfield Forge, as later notices in the *Sussex Weekly Advertiser* revealed, had premises in the High Street.³

2. *Sussex Weekly Advertiser*, 26th November 1759

LEWES, Nov. 26

Last Tuesday Morning died at Wadhurst in this County, Mrs Tapsell, Mother to Mr. Rich. Tapsell, of the same place, Gun Founder, a gentlewoman of very valuable Character, greatly lamented by all who had the pleasure of being acquainted with her.

Richard Tapsell had inherited the management of several furnaces and forges from his mentor, John Legas, in 1752, and was working in collaboration with Robert Bagshaw and the brothers, Andrews and John Harrison, at a busy time for gun foundries during the Seven Years' War. The loss of his mother was likely to have been a bitter blow, coming only a few months after the death of his wife, Anne, at the age of 26, also reported in the paper.⁴ A memorial to his wife, and daughter Sarah who

had died in infancy in 1755, is on the wall inside Wadhurst Church. His surviving daughter, Letitia, would have been about eight years old.

3. *Sussex Weekly Advertiser*, 23rd February 1761

To be SOLD

The Manor of Pennybridge, in the Parish of Mayfield in the County of Sussex, five or six miles from Tunbridge Wells. A small Manor of six Tenants, which pay each a small Quit Rent, and on a Death a Herriot. A Farm, with a new brick House, five Sash Windows in Front, a new Brick Malt House and Oast House, three Barns and a Stable, with Foddering Houses and every other necessary Convenience, with 198 Acres, 1 Quarter, a Rood and 2 Pearches of good Pasture and Arable land, Tythe free, and improveable, now well tenanted, at the yearly rent of 85l. per Annum; the Farm is well watered, and there is plenty of Fish, the land abounds with Iron Mine, which may now be turned to great Advantage, the furnace, for casting the Cannon being very near the said land; with good Orchards and Wall Fruit.

N.B. The Woods and Timber to be valued

Enquire of Mr. John Kent, near the Church in Mayfield, Sussex

The mention of the abundance of iron ore would seem to be hyperbole. Although the site of Mayfield Furnace lies only a short walk from Pennybridge, there is no record that it had been in operation for nearly a century before the publication of this advertisement.

4. *Sussex Weekly Advertiser*, 17 March 1766

To be Sold by AUCTION

At the Star Inn, in Lewes, in one Lot, on Wednesday the 16th day of this instant March, at 12 o'Clock at Noon.

THE Manor of Howbourne, with the Quit rents and Casualties

thereof, together with several hundred of large Tillers, fit for repairs, and some Underwood growing on the Waste, a very good Forge for making Bar Iron, built with Stone, a convenient house for the Forgerman, and a large Outbuilding for Iron and Coals, together with upwards of twelve acres of very fine Land, flowed with Water for the use of the Forge, situate in the parishes of Buxted and Mayfield, or one of them.

One Farm, containing about 160 acres of arable, meadow and pasture ground, situate in the same parishes, let on lease to Edward Gorringe at 90l. per annum, which expires at Michaelmas 1767.

About 20 acres of Woodland fit to cut, and about 660 Oak, and 60 Ash trees.

N. B. All the premises (except the Forgerman's house, garden, coal house, and 16 acres of land) are freehold, those Copyhold of Inheritance and held of the manor (of Framfield), Fine small and certain.

Further particulars to be had of Mr. Rawlison, Attorney, No. 4, in Garden Court in the Temple; or of Mr. Gilbert, Attorney, in Lewes aforesaid; and at the place of Sale.

James Penvold and John Smalman's proprietorship of Howbourne (see 2. above) was not to last for long. The sale advertised here resulted in the purchase of the manor by Robert Saxby,⁵ who was to continue to keep the forge working into the 1770s, either tenanted or in hand. Other sale notices of forges have not usually mentioned the construction of the forge building, so the fact that this one was of stone is, perhaps, worthy of attention. First mentioned in 1537, Howbourne's longevity as a forge was only exceeded by Burwash, Robertsbridge and Ashburnham.

References

1. Surrey History Centre, Woking, Box 3151/2.

2. Combes, P., 1997, 'The Eighteenth Century Revival of Howbourne Forge, Buxted', *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 2nd ser., **17**, 16.
3. Hodgkinson, J. S., 1982, 'The Sussex Weekly Advertiser – some extracts', *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 2nd ser., **2**, 32;
Brent, C., 1993, *Georgian Lewes* (Lewes, Colin Brent Books), 41.
4. Hodgkinson, 1982, 31.
5. Dunkin, E. H. W., 1915, *Sussex Manors, Advowsons etc.* vol. 2 M-Z. (Lewes, Sussex Record Society **20**), 335.

THE PRICKETT FAMILY AND WEALDEN IRON

J. S. HODGKINSON

In 1769 the iron furnace at North Park, near Fernhurst, and its associated forge at Pophole, in Linchmere near Haslemere, were leased to Joseph Wright and Thomas Prickett, iron founders of Southwark.¹ Rate books for Bankside, in the parish of St. Saviour's, Southwark, indicate that Joseph Wright had been in occupation there since at least 1766,² but Thomas Prickett's name had not been noted hitherto. However, Wright and Prickett were already associates at the time of Prickett's second marriage to Catherine Hamer at St George's in the East in December 1759, where Wright was a witness.³ This suggests that Prickett was already working with Wright when the former had been based in Wapping.⁴ Their property on Bankside was the Falcon foundry, which had been occupied successively by several iron founders since the beginning of that century, including Richard Jones, who had had a pivotal role in the installation of the railings around the new St Paul's Cathedral, and Stephen Peters.

However, Wright and Prickett may have begun their involvement with the iron industry in the Weald at the Gloucester Furnace, Lamberhurst, following the hiatus after the bankruptcy of Richard Tapsell in 1765. According to an abstract of title drawn up when Sir Edward Filmer purchased the furnace from the descendants of the Gott family in 1795, the works had been occupied by William Rumens following Tapsell's failure, and then by Wright and Prickett who remained as tenants until 1781.⁵ Additionally, the partnership had taken on the Warren Furnace and Woodcock Forge in 1772 after the sudden relinquishment of its lease by Alexander Raby following the death of his father, Edward, the previous year.⁶

It had seemed that the same Thomas Prickett had remained at Lamberhurst after the partnership gave up their lease in 1781, living at Hoadley Farm and party to a correspondence about one of the

partnership's successors as tenants, William Collens.⁷ However, this now turns out to have been partially incorrect. A Thomas Prickett did live at Hoadley, but a different one, as is explained below. Before then some background needs to be added.

A deed of 1778 in the Gloucestershire Archives records the conveyance of two tenements in the Forest of Dean to a Thomas Moxley, by Charles Prickett, iron founder, formerly of 'Abby, Chapel Hill, Mon[mouthshire]', but then of 'Pophole Linchmoore, Sussex'.⁸ This Charles Prickett had been born in 1717, the son of Charles Prickett, a founder at St Weonard's in Herefordshire, where there was an iron furnace.⁹ By 1744, when he married Elizabeth Fisher, Charles (the younger) had moved to Abbey, a hamlet of Chapel Hill, along the Anghidi Valley to the west of Tintern, where their seven children were born between 1745 and 1760.¹⁰ His description as founder suggests his employment at the furnace further up the valley, and his father's identical occupation reveals a family tradition in the iron trade.¹¹ We do not know when Charles Prickett moved to Linchmere, but it seems likely that it was before 1771 for in October of that year the Linchmere parish register recorded the burial of another Charles Prickett. Clearly not the one who had been party to the 1778 deed; this would appear to have been his eldest son and namesake, who had been born in 1748.

Thomas Prickett and Joseph Wright's lease of North Park Furnace and Pophole Hammer lasted until 1774, when the lease was taken by James Goodyer, who was occupier until his bankruptcy in 1776.¹² The exact family relationship between the older Charles and Thomas Prickett is not known. From the notice of his death in *The Times* of 8th October 1795, at the age of 68, we know that Thomas was born in 1727. Charles had a brother, Thomas, born in 1713, but he died at Tintern in 1737, so it is improbable that there was a brother of the same name born while the older one was in his teens. The baptism of a Thomas Prickett on 1 January 1726 (1727 in New Style) at St Philip's and St Jacob's, Bristol, to a Thomas Prickett and an unnamed mother, could be relevant given the west of England connections of the other Pricketts. With Thomas Prickett and Joseph Wright leasing the Linchmere works from 1769 until 1774, and a familial relationship between Thomas and Charles seeming almost

certain, the latter may have been encouraged to move from Tintern to work at North Park sometime in 1769 or soon after.

Several of Charles Prickett's other children were connected with the iron trade. By the year we first hear of Charles in Sussex, all would have been of working age. The oldest surviving son, Thomas, born in 1750 and also described as a founder, settled in Lamberhurst, perhaps to work the furnace there for the older Thomas during the latter's tenancy. In 1892 the family of the Rev. Robert Hawkins, late Vicar of Lamberhurst, donated to the Sussex Archaeological Society four iron firebacks and five other small castings all made by Thomas Prickett, 'the first of his family who came into this parish about 1769, which have been in the possession of the family to the present time (1883)' – presumably this refers to the older Thomas.¹³ The confusion between the two Thomas Pricketts can be disentangled by their respective wills. The older, of St Saviour's parish, Southwark, the erstwhile partner of Joseph Wright, made his will five days before he died on 4th October 1795. Among the bequests to Prickett family members were those to Thomas, of Hoadley, Lamberhurst, described as a farmer, Richard, of Christchurch parish, Southwark, iron founder, and John, of St Saviour's, Southwark, also an iron founder; all three were the sons of Charles Prickett, though their relationship with the older Thomas is not stated.¹⁴ Also named was Gilbert Handasyde, who had become Prickett's partner at the Falcon works after Joseph Wright had withdrawn from the business.

In his will of 1838, the younger Thomas Prickett described himself as a yeoman of Lamberhurst, but his interest, as partner of his brother, John, in the Furnace Mill was stated at the outset, as was his former occupancy of Hoathley (formerly Hoadley) Farm.¹⁵ He had married Mary Latter at Lamberhurst in 1777 and their eight children were born there between 1778 and 1796. His presence in Lamberhurst during the older Thomas's tenancy, and his later occupation of the Furnace Mill, suggest involvement at the furnace during the tenancy. Surviving correspondence relating to the succeeding tenancy indicates that Thomas Prickett was established as a farmer at Hoathley in the 1780s.¹⁶ By his death he had become a prosperous landowner, and his descendants continued to live in Lamberhurst and adjacent parishes for several generations.

Thomas's brother, Richard, was born in 1753 and nothing is known of

him until 1778 when his name appears in the Land Tax records for Maresfield, Sussex, as tenant at Maresfield Forge.¹⁷ His tenure was short lived, lasting only until the following year, but it saw the marriage at the parish church, of Elizabeth the middle one of his three sisters, to Henry Wren, blacksmith, of the family in that trade from Godstone in Surrey. William Wren, his father, had regular dealings with Robert Knight the carrier associated with Warren Furnace and Woodcock Forge which Thomas Prickett and Joseph Wright had leased in 1772.¹⁸ Richard Prickett's name reappears in 1783 in the role of smith to the Board of Ordnance, when he returned to England in that year from New York where he had been stationed with the Royal Artillery.¹⁹ By 1802 of Christ Church parish, Southwark, and described as an iron founder when he made his will, he died in the same year.²⁰

John Prickett, Charles's youngest son, who was born in 1760, was described as an iron founder of St Saviour's, Southwark, in the older Thomas's will of 1795, suggesting that he may have been working at the Falcon Foundry at that time. Later of Wadhurst, he died in 1834 and was buried at Lamberhurst. According to the 1838 will of his brother, the younger Thomas, he had evidently been a miller as well and debts owed by John to Thomas had remained unsettled four years on.

The connection of the brothers, Thomas and John Prickett with the older Thomas and the Falcon Foundry is further elaborated by a succession of leases of the foundry by the Winchester Bishopric Estate. Although clearly not the first lease of the property to Joseph Wright and Thomas Prickett, a lease of August 1782 has survived.²¹ Following Joseph Wright's withdrawal from the partnership the next lease, in June 1787, is to Thomas and his new partner, Gilbert Handasyde.²² After Thomas Prickett's death a lease of May 1806 is to Handasyde and the younger Thomas Prickett and his brother John, the beneficiaries of the older Thomas's will.²³ By August 1813, however, the brothers had withdrawn from the partnership and it was to Handasyde alone that the next lease was granted.²⁴

Charles Prickett of Tintern, and later Linchmere, died at Lamberhurst in 1789, his widow in 1794. As a family of ironworkers, the Pricketts had done the opposite of what many families of ironworkers had done at that time and moved into the Weald when, exacerbated by the dearth of orders

for ordnance following the Treaty of Paris at the end of the Seven Years' War in 1763, the region was suffering a sharp decline in output and importance. The success of the older Thomas Prickett in his partnership with Joseph Wright had, it seems, provided the incentive for the move, members of the family finding employment at each of the works that the partnership leased, whether in the Weald or in Southwark.

I am most grateful for information supplied to me by Gordon Mabb, without whose initial contact and subsequent help the foregoing would not have been compiled.

Notes and References

1. West Sussex Record Office, Chichester (hereafter WSRO), Cowdray 1443, 1444.
2. Southwark Local Studies Library, Southwark, Poor Rate book 1766-8.
3. London Metropolitan Archives, Registers of St George in the East, 17th December 1759.
4. Coote, J., 1763, *The Universal Director* (London).
5. Hodgkinson, J. S., 2012, 'Notices of Wealden ironworks in early English newspapers', *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 2nd ser. **32**, 25.
6. *Ibid.*, 21
7. Kent History and Library Centre, Maidstone (hereafter KHL), U840 EB317.
8. Gloucestershire Archives, Gloucester, D2957/161/16.
9. Herefordshire Record Office, Hereford, MX79 (microfilm), Bishop's Transcripts of St Weonards.
10. Gwent Archives, Ebbw Vale, Registers of Chapel Hill.
11. The furnace was excavated in the late 1970s-80s and the consolidated remains are open to the public.
12. WSRO Cowdray 1445. The National Archives, Kew (hereafter TNA), B4 21 1st October 1777.
13. Phillips, C. T., 1894, 'Interesting Additions to the Museum', *Sussex Archaeological Collections*, **39**, 214-5.

14. TNA, PROB 11/1266/287.
15. TNA, PROB 11/1915/221.
16. KHLIC, U840 EB317.
17. East Sussex Record Office, Moulsecoomb, ELT Maresfield.
18. WSRO, Cash Account Book of Robert Knight, carrier, Add Ms 46861.
19. Brown, R. R. 1994, 'Wealden ironmasters and the Board of Ordnance after 1770', *Wealden Iron*, Bulletin of the Wealden Iron Research Group, 2nd ser. **14**, 42; the comment that he was the older Thomas Prickett's brother is now shown to have been incorrect.
20. TNA, PROB 11/1380/216.
21. Hampshire Record Office, Winchester (hereafter HRO), 11M59/D1/4, p. 296.
22. HRO, 11M59/D1/5, p. 701.
23. HRO, 11M59/D1/10, p. 64.
24. HRO, 11M59/D1/11, p. 128.

INDEX

Ashdown Beds, 3, 19

Bagshaw, Robert, 34

Baker, Samuel, 33

bloomeries, 3, 4, 5, 6

boring mill, 19, 20, 21, 23

boring bar, 30

Brede (East Sussex)

Gilly Wood bloomeries, 3

Brinklaw, Brokelaw or Bunklaw

Forge, *see* Frant

Buxted (East Sussex)

Howbourne Forge, 34, 36

Queenstock (Iron Plat) Forge
and Furnace, 20

Canterbury, archbishop of, 18

Carpenter, John, 10

Chapel Hill (Gwent)

Abbey, 39

Chiddingly (East Sussex)

Stream Furnace and Forge, 4,
27-32

Stream Mill, 28

Christ Church, Southwark

(London)

Falcon Foundry, 38, 40, 41

Collens, William, 39

Cornish, T., 18

Cripps, Christopher, 34

Dyke, Thomas, 27

East Lynden Furnace, *see*

Ticehurst

Falcon Foundry, *see* Christ
Church, Southwark

Fernhurst (North Park) Furnace,
see Linchmere

Filmer, Edward, 38

Fisher, Elizabeth, 39, 41

Fowle, Nicholas, 11

Fowle, William, 11

Frant (East Sussex)

Furnace Wood, 15

Great Wood, 10

Henly Lower Furnace, 10-16

Henly Upper Furnace or
(Brokelaw) Forge, 10-16

Lightlands, 11

Frant, manor of, 10, 14

French, John, 27

French, Stephen, 27, 28

Fuller, John (1617-79), 27

Fuller, John (1652-1722), 27

Gloucester Furnace, *see*

Lamberhurst

Godstone (Surrey)

Woodcock Hammer, 33, 38, 41

Goodyer, James, 39

Gorringe, Edward, 34, 36

Gott family, 38

Gresham, Thomas, 10, 22

Hamer, Catherine, 38

Handasyde, Gilbert, 40, 41

- Harrison, Andrews, 34
 Harrison, John, 34
 Hedgecourt (Warren) Furnace, *see* Worth
 Henly Lower Furnace, *see* Frant
 Henly Upper Furnace or Forge, *see* Frant
 Herbert, B. K., 18
 Hodgkinson, J. S., 3, 10, 33, 36
 Howbourne Forge, *see* Buxted
 Howbourne, manor of, 34, 36

 Iron Age, 3, 5
 iron mining, 4, 7
 iron slag, 3, 4, 7, 9, 28
 analysis, 9

 Jones, Richard, 38

 Knight, Robert, 41

 Lamberhurst (Kent)
 Furnace Mill, 40
 Gloucester Furnace, 38
 Hoadley Farm, 38
 Latter, Mary, 40
 Legas, John, 34
 Linchmere (West Sussex)
 Fernhurst (North Park) Furnace, 38
 Pophole Hammer, 39
 Lindfield Rural (West Sussex)
 Birchen Wood, 5
 bloomery, 5

 Maresfield (East Sussex)
 Maresfield Forge, 34, 41
 Mayfield (East Sussex)
 Baker estate map (1663), cover
 Mayfield Forge, 18-26
 Mayfield Furnace, 18, 35
 Montague, Edward, 27
 Moxley, Thomas, 39

 North Park (Fernhurst) Furnace, *see* Linchmere
 Nutt, John, 27

 Ordnance, Board of, 41

 Pennybridge, manor of, 35
 Penvold, James, 34, 36
 Peters, Stephen, 38
 Pophole Hammer, *see* Linchmere
 pottery, medieval, 5
 Prickett, Charles (fl. bef. 1717), 39
 Prickett, Charles (1717-89), 39, 41
 Prickett, Charles (d. 1771)
 Prickett, Elizabeth, 41
 Prickett family, 38-42
 Prickett, John, 40
 Prickett, Richard, 40
 Prickett, Thomas (1713-37), 39
 Prickett, Thomas (1727-95), 38, 39, 41, 42
 Prickett, Thomas (1750-1838), 39, 40

 Queenstock (Iron Plat) Forge and Furnace, *see* Buxted

 Raby, Alexander, 38

Raby, Edward, 38
 radiocarbon dating, 3, 6
 round shot, 30
 Rumens, William, 38

Saxby, Robert, 36
 Shoyswell, Thomas, 6
 Smalman, John, 34, 36
 Smith, T. G., 4, 6, 27
 Southborough (Kent)
 Brokes Wood bloomery, 3
 Stream Furnace and Forge, *see*
 Chiddingly

Tapsell, Richard, 34, 38
 Tapsell, Anne, 34
 Tapsell, Letitia, 35
 Tapsell, Sarah, 34
 Ticehurst (East Sussex)
 East Lynden Furnace, 6-9
 Tunbridge Wells Sand, Lower, 5

Wadhurst (East Sussex)
 Riverhall Forge, 10- 16
 Riverhall Furnace, 10-16
 Riverhall (house), 11
 Riverhall Mill, 13
 Wadhurst Clay, 3, 5, 19
 Waldron (East Sussex)
 bloomeries, 4
 Hawkhurst Common Wood, 4
 Waldron Furnace, 4
 Warren (Hedgecourt) Furnace, *see*
 Worth

Whitfield, John, 33
 Winchester Bishopric Estate, 41
 Withyham (East Sussex)
 Summersales, 4
 Woodcock Hammer, *see* Godstone
 Worth (West Sussex)
 Warren (Hedgecourt) Furnace,
 33, 38, 41
 Wren, Henry, 41
 Wren, William, 41
 Wright, Joseph, 38, 39, 41, 42

